

DEC 29 1997

Duramed Pharmaceuticals, Inc.
Attention: John Rapoza, M.S.
5040 Lester Road
Cincinnati, Ohio 45213
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Dear Sir:

This is in reference to your abbreviated new drug application dated October 24, 1996, submitted pursuant to Section 505(j) of the Federal Food, Drug, and Cosmetic Act, for Loperamide Hydrochloride Oral Solution, 1 mg/5 mL.

Reference is also made to your amendments dated May 22, August 6 and 29, September 25, November 3 and December 23, 1997.

We have completed the review of this abbreviated application and have concluded that the drug is safe and effective for use as recommended in the submitted Over-The-Counter (OTC) labeling. Accordingly, the application is approved. The Division of Bioequivalence has determined your Loperamide Hydrochloride Oral Solution, 1 mg/5 mL, to be therapeutically equivalent to the listed drug (Imodium A-D® Liquid, 1 mg/5 mL, of McNeil Consumer Products Co.).

Under 21 CFR 314.70, certain changes in the conditions described in this abbreviated application require an approved supplemental application before the change may be made.

Post-marketing reporting requirements for this abbreviated application are set forth in 21 CFR 314.80-81. The Office of Generic Drugs should be advised of any change in the marketing status of this drug.

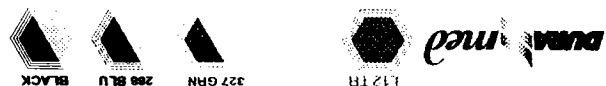
Validation of the regulatory methods has not been completed. It is the policy of the Office not to withhold approval until the validation is complete. We acknowledge your commitment to satisfactorily resolve any deficiencies which may be identified.

Sincerely yours,

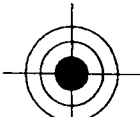
Douglas L. Sporn
Director
Office of Generic Drugs
Center for Drug Evaluation and Research

12/29/97

1001 8 3



8.813 x 7.594 " DIST. @ 100% PO# PP# DRAFT/PROOF
Duramed - C00248 Loperamide Oral 2 oz
4/C 10/27/97



1601 6 3 300

GEORGIA

Loperamide HCl
Oral Solution
ANTI-DIARRHEAL

Each teaspoonful (5 mL) contains:
loperamide hydrochloride 1 mg
alcohol 4.5%

DURA *med*
NDC 51285-715-53
Loperamide HCl
Oral Solution
ANTI-DIARRHEAL
[Loperamide hydrochloride oral solution is for the adult use only.]

Loperamide HCl
Oral Solution
ANTI-DIARRHEAL

DURAmed
NDC 51285-715-53
Loperamide HCl
Oral Solution
ANTI-DIARRHEAL

Loperamide HCl
Oral Solution
ANTI-DIARRHEAL

Controls the Symptoms of diarrhea, including Travelers' Diarrhea.

Convenient dosage cup

Cherry-bubble gum flavor

MANUFACTURED BY:
DURAMED PHARMACEUTICALS, INC.
CINCINNATI, OHIO 45213 USA

2 fl oz (59 mL)

Each teaspoonful (5 mL) contains:
loperamide hydrochloride 1 mg
alcohol 4.5%

See bottom panel for expiration date.
Store at room temperature 15-30°C
(59-86°F) and avoid excessive heat.

Convenient dosage cup
enclosed.

Controls the Symptoms of Diarrhea, including Travelers' Diarrhea.

Loperamide HCl
Oral Solution
ANTI-DIARRHEAL

ACTIVE INGREDIENTS: Loperamide HCl 1mg per capsule (5 mL).
INACTIVE INGREDIENTS: Alcohol anise, anethol, bubble gum, and artificial cherry flavors, citric acid, glycerin, methylparaben, propylparaben, and purified water.

C00248
 Iss. 10/97

16/01/97

C00248



DEC 29 1997

APPROVED

Each teaspoonful (5 mL) contains:
 loperamide hydrochloride 1 mg
 alcohol 4.5%

Loperamide HCl
 Oral Solution
 ANTI-DIARRHEAL

DURA med

NDC 51285-715-55

Loperamide HCl
 Oral Solution
 ANTI-DIARRHEAL

Loperamide hydrochloride oral solution is for the effective treatment of diarrhea. Loperamide HCl relieves diarrhea, often in just one dose, in both adults and children 6 years and older and is effective for Traveler's Diarrhea. INDICATION: Loperamide Hydrochloride Oral Solution controls the symptoms of diarrhea, including Traveler's Diarrhea. DIRECTIONS: Use the enclosed dosage cup to accurately measure Loperamide Hydrochloride Oral Solution as noted below. Drink plenty of clear fluids to help prevent dehydration, which may accompany diarrhea.

ADULTS AND CHILDREN 12 YEARS OF AGE AND OLDER:
 1st: 2nd, if needed:
 Take 4 teaspoonfuls (1/2 dosage cup) after the first loose bowel movement and 2 teaspoonfuls after each subsequent loose bowel movement but no more than 8 teaspoonfuls a day for no more than 2 days.

CHILDREN 9-11 YEARS (80-145 LBS):
 1st: 2nd, if needed:
 Take 2 teaspoonfuls (1/2 dosage cup) after the first loose bowel movement and 1 teaspoonful after each subsequent loose bowel movement but no more than 5 teaspoonfuls a day for no more than 2 days.

CHILDREN 6-8 YEARS (40-59 LBS):
 1st: 2nd, if needed:
 Take 2 teaspoonfuls (1/2 dosage cup) after the first loose bowel movement and 1 teaspoonful after each subsequent loose bowel movement but no more than 4 teaspoonfuls a day for no more than 2 days.

CHILDREN UNDER 6 YEARS OLD (UP TO 47 LBS): CONSULT A PHYSICIAN. NOT INTENDED FOR CHILDREN UNDER 6 YEARS OLD.
WARNING: KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN. DO NOT USE FOR MORE THAN TWO DAYS UNLESS DIRECTED BY A PHYSICIAN. DO NOT USE IF DIARRHEA IS ACCOMPANIED BY HIGH FEVER (GREATER THAN 101°F) OR IF BLOOD OR MUCUS IS PRESENT IN THE STOOL, OR IF YOU HAVE HAD A RASH OR OTHER ALLERGIC REACTION TO LOPERAMIDE HCl. If you are taking antibiotics or have a history of liver disease, consult a physician before using this product. As with any drug, if you are pregnant or nursing a baby, seek the advice of a health professional before using this product. In case of accidental overdose, seek professional assistance or contact a poison control center immediately.

ACTIVE INGREDIENTS: Loperamide HCl 1mg per teaspoonful (5 mL). Alcohol (4.5%).
INACTIVE INGREDIENTS: artificial anise, artificial bubble gum, and artificial cherry flavors, citric acid, glycerin, methylparaben, propylparaben, and purified water.

NDC 51285-715-55

Loperamide HCl
 Oral Solution
 ANTI-DIARRHEAL

Controls the Symptoms of diarrhea, including Travelers' Diarrhea.

Convenient dosage cup enclosed.

Cherry-bubble gum flavor

MANUFACTURED BY:
 DURAMED PHARMACEUTICALS, INC.
 CINCINNATI, OHIO 45213 USA

DURA med

NDC 51285-715-55

Loperamide HCl
 Oral Solution
 ANTI-DIARRHEAL

Controls the Symptoms of Diarrhea

Each teaspoonful (5 mL) contains:
 loperamide hydrochloride 1 mg
 alcohol 4.5%

4 fl oz (118 mL)



NDC 51285-715-55

Loperamide HCl
 Oral Solution
 ANTI-DIARRHEAL

Controls the Symptoms of diarrhea, including Travelers' Diarrhea.

Convenient dosage cup enclosed.

See bottom panel for expiration date.
 Store at room temperature 15-30°C (59-86°F) and avoid excessive heat.

C00249

Iss. 10/97

- U_u
1. CHEMISTRY REVIEW NO. 2
 2. ANDA # 74-991
 3. NAME AND ADDRESS OF APPLICANT
Duramed Pharmaceuticals, Inc.
Attention: John R. Rapoza, M.S., R.Ph.
5040 Lester Road
Cincinnati, OH 45213
 4. LEGAL BASIS FOR SUBMISSION
The basis for the ANDA is the approved, reference listed drug
Immodium A-D (loperamide hydrochloride oral solution),
manufactured by McNeil Consumer Products Co.
 5. SUPPLEMENT(s)
N/A
 6. PROPRIETARY NAME
N/A
 7. NONPROPRIETARY NAME
Loperamide Hydrochloride
 8. SUPPLEMENT(s) PROVIDE(s) FOR:
N/A
 9. AMENDMENTS AND OTHER DATES:

Orig. Submission	10/23/96
Ack. Letter	12/27/96
NA Letter	02/24/97
Amendment	05/22/97
 10. PHARMACOLOGICAL CATEGORY
Anti-diarrheal
 11. Rx or OTC
OTC
 12. RELATED IND/NDA/DMF(s)
 13. DOSAGE FORM
Oral Solution
 14. POTENCY
1 mg/5 mL
 15. CHEMICAL NAME AND STRUCTURE

$C_{29}H_{33}ClN_2O_2.HCl$	USP 23 drug substance
M.W. 513.51	Non-USP drug product
 16. RECORDS AND REPORTS
N/A
 17. COMMENTS
See item #38.
 18. CONCLUSIONS AND RECOMMENDATIONS
Not approvable; Facsimile.

19. REVIEWER:
Andrew J. Langowski

DATE COMPLETED:
6/19/97

AND 74-991

MAR - 5 1997

Duramed Pharmaceuticals, Inc.
Attention: John R. Rapoza, M.S., R.Ph.
5040 Lester Road
Cincinnati OH 45213
|||||


Dear Sir:

Reference is made to your abbreviated new drug application dated October 23, 1996, submitted pursuant to Section 505 (j) of the Federal Food, Drug and Cosmetic Act for Loperamide Hydrochloride Oral Solution USP 1 mg/5 mL.

The Division of Bioequivalence has completed its review and has no further questions at this time.

Please note that the bioequivalency comments expressed in this letter are preliminary. The above bioequivalency comments may be revised after review of the entire application, upon consideration of the chemistry, manufacturing and controls, microbiology, labeling or other scientific or regulatory issues. A revised determination may require additional information and/or studies, or may conclude that the proposed formulation is not approvable.

Sincerely yours,

 Nicholas Fleischer, Ph.D.
Director, Division of Bioequivalence
Office of Generic Drugs
Center for Drug Evaluation and Research

FEB 28 1997

Loperamide HCl

Oral Solution

1 mg/5 mL

ANDA # 74-991

Reviewer: Z.Z. Wahba

File# 74991w.096

Duramed Pharmaceuticals, Inc.

Cincinnati, OH

Submission Date:

Oct. 23, 1996

REVIEW OF A WAIVER REQUEST

BACKGROUND

1. The firm has requested a waiver of in vivo bioequivalence study requirements for its drug product, Loperamide HCl Oral Solution, 1 mg/5 mL which contains drug ingredients in the same solvent and concentration as that approved in a new drug application manufactured by McNeil Consumer Products Co. under the trade name Imodium A-D® (NDA #19-487).
2. The drug is indicated for control of the symptoms of diarrhea, including Travelers' Diarrhea.

FORMULATION COMPARISON

INGREDIENT	Test Quantity/5 mL		Reference Quantity/5 mL
	mg/5 mL Dose	% (W/V)	mg/5 mL Dose
Loperamide Hcl	1.00	0.02	1.00
Glycerin			
Alcohol			
Methylparaben			
Propylparaben			
Citric acid			
Flavors			
Artificial Bubble Gum Flavor 175303			
Artificial Wild Cherry Flavor 29653			

Artificial Anise Flavor 175307			
Purified Water			listed

COMMENTS

The drug product meets the criteria for waiver of in vivo bioequivalence study requirements under 21 CFR 320.22 (b) (3) (I) (ii) and (iii).

- (I) The test product is an oral solution.
- (ii) It contains an active drug ingredient in the same concentration and dosage form as a drug product that is the subject of an approved full NDA.
- (iii) It contains no inactive ingredient that may significantly affect absorption of the active drug ingredient.

RECOMMENDATION

The Division of Bioequivalence agrees that the information submitted by Duramed Pharmaceuticals, Inc. on its drug product, Loperamide HCl Oral Solution, 1 mg/5 mL falls under 21 CFR section 320.22(b) (3) (I) (ii) and (iii) of the Bioavailability/Bioequivalence Regulations. The waiver of in vivo bioequivalence study for the drug is granted. From the Bioequivalence point of view, the Division of Bioequivalence deems Duramed's Loperamide HCl Oral Solution, 1 mg/5 mL to be bioequivalent to reference drug product, Imodium A-D®, 1 mg/5 mL, manufactured by McNeil Consumer Products.

The firm should be informed of the recommendation.

Zakaria Z. Wahba, Ph.D.
Division of Bioequivalence
Review Branch III

RD INITIALLED RMHATRE
FT INITIALLED RMHATRE

Concur: _____

Rabindra N. Patnaik, Ph.D.
Acting Director
Division of Bioequivalence

Date: _____

2/27/97
2/28/97

cc: ANDA# 74-991, (original, duplicate), HFD-600 (Hare), HFD-630, HFC-130 (JAllen), HFD-658 (Mhatre, Wahba), Drug File, Division File.

ZZWahba/021897/022797/file#74991w.o96



*The Art of Leadership...
The Science of Change*

Duramed Pharmaceuticals, Inc.
5040 Lester Road
Cincinnati, Ohio 45213
(513) 731-9900

May 22, 1997

NDA ORIG AMENDMENT

N/AC

Mr. Doug Sporn, Director
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II
7500 Standish Place, Room 150
Rockville, MD 20855-2773

RE: ANDA 74-991 for Loperamide Hydrochloride Oral Solution, 1 mg/5 mL

Subject: **MAJOR AMENDMENT**

Dear Mr. Sporn:

Reference is made to your correspondence dated February 24, 1997 concerning deficiencies in our Abbreviated New Drug Application #74-991 for Loperamide Hydrochloride Oral Solution, 1 mg/5 mL

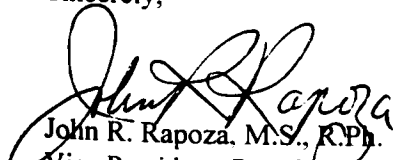
We have noted the deficiencies cited and are amending the application, having responded to all of the deficiencies. For each item we first restate the deficiency then present our response or explanation.

This **Major Amendment** includes two (2) copies, an archival copy and a review copy.

We certify that a true copy of this submission has been provided to the Food and Drug Administration, Cincinnati District Office, Cincinnati, Ohio.

If you have any questions, please feel free to contact Ms. Annette Arlinghaus by telephone at (513) 731-9900, or by fax at (513) 731-6482, or the undersigned at (513) 458-7274.

Sincerely,


John R. Rapoza, M.S., R.Ph.
Vice President, Regulatory Affairs

MAY 21 1997



*The Art of Leadership...
The Science of Change*

*Summary
10/26/96*

Duramed Pharmaceuticals, Inc.
5040 Lester Road
Cincinnati, Ohio 45213
(513) 731-9900

October 23, 1996

Mr. Douglas L. Sporn
Director, Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II
7500 Standish Place, Room 150
Rockville, MD 20855-2773

RE: New ANDA for Loperamide HCl Oral Solution, 1 mg/5 mL

Dear Mr. Sporn:

Duramed Pharmaceuticals, Inc. (Duramed) submits today, in accordance with 21CFR 314.94, an original abbreviated new drug application (ANDA) seeking approval to market Loperamide HCl Oral Solution, 1 mg/5 mL, that is equivalent to the reference drug, Imodium A-D®, manufactured by McNeil Consumer Products Co. pursuant to NDA # 19-487.

Duramed's Loperamide HCl Oral Solution (1) is an oral solution; (2) contains the active drug ingredient in the same concentration and dosage form as Imodium A-D®; and (3) contains the same inactive ingredients, except for flavor, as Imodium A-D®. The drug product meets the requirements of 21 CFR, 320.22(b)(3); thus, the Bioavailability/Bioequivalence section contains a request for waiver of the requirement for submission of evidence of in vivo bioequivalence.

Loperamide HCl Oral Solution, 1 mg/5 mL is stable and a two year expiration dating is requested for all package sizes. The two year expiration dating is supported by six months accelerated stability testing and twenty-four months room temperature stability.

This ANDA is submitted in two (2) volumes. Duramed is filing an archival copy (blue folders) of the application that contains all the information required in the ANDA and a technical review copy (red folders) containing all the information in the archival copy with the exception of the Bioequivalence section. A separate copy of the Bioequivalence section is provided in an orange folder. Because this is a non-USP drug, two additional copies of method validation (Section XV) are provided in red folders.

For detailed information on the organization of this application, please refer to the following "EXECUTIVE SUMMARY - Organization of the ANDA".

We certify that a true copy of the technical section described in 21 CFR 314.50 (d)(1), the chemistry, manufacturing, and controls section of this submission, has been provided to the Food and Drug Administration, Cincinnati, District Office in Cincinnati, Ohio.

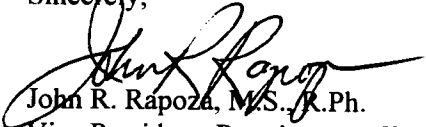
Page 2

To: Mr. Douglas L. Sporn

Subject: ANDA for Loperamide HCl Oral Solution. 1 mg/5 mL

Please direct any written communications regarding this ANDA to me at the above address. If you have any questions or require any additional information, please feel free to contact Mr. James Mason or me at (513) 731-9900.

Sincerely,



John R. Rapoza, M.S., R.Ph.
Vice President, Regulatory Affairs

Duramed Pharmaceuticals, Inc.
Attention: John R. Rapoza, M.S., R.Rh.
5040 Lester Road
Cincinnati, OH 45213
|||||

Dear Sir:

NAME OF DRUG: Loperamide Hydrochloride Oral Solution, 1 mg/5 mL

DATE OF APPLICATION: October 23, 1996

DATE OF RECEIPT: October 24, 1996

We will correspond with you further after we have had the opportunity to review the application.

Please identify any communications concerning this application with the ANDA number shown above.

Should you have questions concerning this application, contact:

Kassandra Sherrod
Project Manager
(301) 594-0305

Sincerely yours,

12/21/94
Jerry Phillips
Director
Division of Labeling and Program Support
Office of Generic Drugs
Center for Drug Evaluation and Research